

WHAT IS CLAIMED IS:

1. A method for managing a call, comprising:
receiving, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected;
sending a notification of the call to a device associated with the customer;
receiving a response to the notification from the customer; and
instructing the service control point to connect the call based on the response.
2. The method of claim 1, wherein, prior to the information receiving step, a switch intercepts the call.
3. The method of claim 2, wherein the switch intercepts the call upon encountering a trigger.
4. The method of claim 2, wherein the trigger is a terminating attempt trigger.
5. The method of claim 2, wherein the trigger is a specific digit string trigger.
6. The method of claim 2, further comprising sending an announcement

to the switch by the service control point.

7. The method of claim 6, comprising playing the announcement for a calling party while the service control point is waiting for a response.

8. The method of claim 1, wherein the information pertaining to the call comprises at least one of call state data, a call intercept indicator, a voice mail indicator, time zone data, user ID, called number data, calling name data, calling number data, and calling party number presentation information.

9. The method of claim 1, wherein receiving the information pertaining to the call comprises receiving the information pertaining to the call via a Generic Data Interface.

10. The method of claim 1, further comprising, prior to sending the notification:

retrieving data corresponding to the customer using the information pertaining to the call; and

determining the features that are enabled for the customer based on the information pertaining to the call.

11. The method of claim 1, the sending comprising:

retrieving data corresponding to the customer using the information pertaining to the call;

selecting a device associated with the customer to receive the notification based on the data corresponding to the customer; and

providing the notification to the selected device for display on the selected device.

12. The method of claim 10, the sending comprising:

selecting a device associated with the customer to receive the notification based on the retrieved data; and

providing the notification to the selected device for display on the selected device.

13. The method of claim 12, wherein the retrieved data comprises an indication of an access point that the customer is using.

14. The method of claim 12, wherein the retrieved data comprises at least one of an indication of an access point that the customer is using, a call block list, a list of forwarding devices, a list of forwarding numbers, voice mail preferences, and a list of recordings.

15. The method of claim 12, the retrieving comprising:

determining a customer identification using called number data; and
finding an indication of an access point being used by the customer, utilizing the customer identification.

16. The method of claim 1, wherein the notification comprises a plurality of customer-selectable call disposition options.

17. The method of claim 16, wherein the notification comprises an indication of a calling number and a called number.

18. The method of claim 16, wherein the notification is displayed on the device associated with the customer.

19. The method of claim 16, wherein the call disposition options comprise at least one of sending a call to voice mail, forwarding a call to another device, performing a call screening operation, accepting a call, playing an announcement, placing a call on hold, scheduling a call back operation, performing an automatic call back operation, performing a call block operation, and initiating a conference call.

20. The method of claim 16, wherein the call disposition options comprise forwarding a call to another device.

21. The method of claim 16, wherein the call disposition options comprise performing a call screening operation.

22. The method of claim 16, wherein the call disposition options comprise scheduling a call back operation.

23. The method of claim 16, wherein the call disposition options comprise performing an automatic call back operation.

24. The method of claim 16, wherein the call disposition options comprise initiating a conference call.

25. The method of claim 12, wherein the notification includes a plurality of customer-selectable call disposition options limited by the features determined to be enabled.

26. The method of claim 1, the instructing comprising:
sending the service control point response information indicative of the response to the notification from the customer.

27. The method of claim 26, wherein the response information includes at least one of call disposition information, forwarding number information, nature of

forwarding number information, carrier access code, announcement type, and ring cadence.

28. The method of claim 26, wherein the response information includes call disposition information.

29. The method of claim 28, wherein the call disposition information comprises an indication of at least one of sending a call to voice mail, forwarding a call to another device, performing a call screening operation, accepting a call, playing an announcement, placing a call on hold, scheduling a call back operation, performing an automatic call back operation, performing a call block operation, and initiating a conference call.

30. The method of claim 1, the instructing comprising:
instructing the service control point to forward the call to another device based on the response to the notification.

31. The method of claim 30, further comprising forwarding the call to another device having a phone number entered by the customer.

32. The method of claim 30, further comprising forwarding the call to another device having a phone number selected from a list by the customer.

33. A method for managing a call, comprising:

receiving, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected;

retrieving data corresponding to the customer using the information pertaining to the call;

sending a notification of the call to a device associated with the customer, wherein the device is determined based on the retrieved data;

receiving a response to the notification from the customer; and

instructing the service control point to connect the call based on the response.

34. The method of claim 33, wherein the information pertaining to the call includes at least one of call state data, a call intercept indicator, a voice mail indicator, time zone data, user ID, called number data, calling name data, calling number data, and calling party number presentation information.

35. The method of claim 33, wherein the retrieved data comprises an indication of an access point that the customer is using.

36. The method of claim 33, wherein the notification comprises a plurality of customer-selectable call disposition options.

37. The method of claim 36, wherein the call disposition options comprise at least one of sending a call to voice mail, forwarding a call to another device, performing a call screening operation, accepting a call, playing an announcement, placing a call on hold, scheduling a call back operation, performing an automatic call back operation, performing a call block operation, and initiating a conference call.

38. The method of claim 36, wherein the call disposition options comprise forwarding a call to another device.

39. The method of claim 36, wherein the call disposition options comprise performing a call screening operation.

40. The method of claim 36, wherein the call disposition options comprise scheduling a call back operation.

41. The method of claim 36, wherein the call disposition options comprise performing an automatic call back operation.

42. The method of claim 36, wherein the call disposition options comprise initiating a conference call.

43. A method for managing a call in real-time based on input from a user,

comprising:

receiving information pertaining to a call to the user;

sending a notification of the call to a first device associated with the user;

receiving a response to the notification from the user; and

forwarding the call to a second device based on the response, wherein the user provides a telephone number for the second device.

44. The method of claim 43, the sending comprising:

retrieving data corresponding to the user using the information pertaining to the call;

selecting a device associated with the user to receive the notification based on the data corresponding to the user; and

providing the notification to the selected device for display on the selected device.

45. The method of claim 44, wherein the retrieved data comprises an indication of an access point that the user is using.

46. A method for managing a call in real-time based on input from a user, comprising:

receiving information pertaining to a call to a user;

retrieving data corresponding to the user using the information pertaining to the

call;

selecting a device associated with the user to receive a notification of the call based on the retrieved data corresponding to the user;

providing the notification to the selected device for display on the selected device;

receiving a response to the notification from the user; and

initiating a call screening process based on the response.

47. The method of claim 46, wherein the retrieved data comprises an indication of an access point that the user is using.

48. A method for managing a call, comprising:

receiving, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected;

retrieving data corresponding to the customer using the information pertaining to the call;

determining features enabled for the customer based on the information pertaining to the call;

selecting a device associated with the customer to receive a notification of the call based on the retrieved data;

providing the notification to the selected device;

receiving a response to the notification from the customer; and

instructing the service control point to connect the call based on the response.

49. An apparatus for managing a call, comprising:

means for receiving, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected;

means for sending a notification of the call to a device associated with the customer;

means for receiving a response to the notification from the customer; and

means for instructing the service control point to connect the call based on the response.

50. The apparatus of claim 49, wherein a switch intercepts the call upon encountering a trigger.

51. The apparatus of claim 50, wherein the service control point sends an announcement to the switch.

52. The apparatus of claim 51, wherein the announcement is played for a calling party while the service control point is waiting for a response.

53. The apparatus of claim 49, wherein the information pertaining to the

call comprises at least one of call state data, a call intercept indicator, a voice mail indicator, time zone data, user ID, called number data, calling name data, calling number data, and calling party number presentation information.

54. The apparatus of claim 49, further comprising:

means for retrieving data corresponding to the customer using the information pertaining to the call; and

means for determining features that are enabled for the customer based on the information pertaining to the call.

55. The apparatus of claim 49, the means for sending comprising:

means for retrieving data corresponding to the customer using the information pertaining to the call;

means for selecting a device associated with the customer to receive the notification based on the data corresponding to the customer; and

means for providing the notification to the selected device for display on the selected device.

56. The apparatus of claim 54, the means for sending comprising:

means for selecting a device associated with the customer to receive the notification based on the retrieved data; and

means for providing the notification to the selected device for display on the

selected device.

57. The apparatus of claim 56, wherein the retrieved data comprises an indication of an access point that the customer is using.

58. The apparatus of claim 56, wherein the retrieved data comprises at least one of an indication of an access point that the customer is using, a call block list, a list of forwarding devices, a list of forwarding numbers, voice mail preferences, and a list of recordings.

59. The apparatus of claim 56, the means for retrieving comprising:
means for determining a customer identification using called number data; and
means for finding an indication of an access point being used by the customer, utilizing the customer identification.

60. The apparatus of claim 49, wherein the notification comprises a plurality of customer-selectable call disposition options.

61. The apparatus of claim 60, wherein the notification comprises an indication of a calling number and a called number.

62. The apparatus of claim 60, wherein the notification is displayed on the

device associated with the customer.

63. The apparatus of claim 60, wherein the call disposition options comprise at least one of sending a call to voice mail, forwarding a call to another device, performing a call screening operation, accepting a call, playing an announcement, placing a call on hold, scheduling a call back operation, performing an automatic call back operation, performing a call block operation, and initiating a conference call.

64. The apparatus of claim 54, wherein the notification comprises a plurality of customer-selectable call disposition options limited by the features determined to be enabled.

65. The apparatus of claim 49, the means for instructing comprising:
means for sending the service control point response information indicative of a response to the notification from the customer.

66. The apparatus of claim 65, wherein the response information includes at least one of call disposition information, forwarding number information, nature of forwarding number information, carrier access code, announcement type, and ring cadence.

67. The apparatus of claim 66, wherein the call disposition information comprises an indication of at least one of sending a call to voice mail, forwarding a call to another device, performing a call screening operation, accepting a call, playing an announcement, placing a call on hold, scheduling a call back operation, performing an automatic call back operation, performing a call block operation, and initiating a conference call.

68. The apparatus of claim 49, the means for instructing comprising:
means for instructing the service control point to forward the call to another device based on the response to the notification.

69. The apparatus of claim 68, wherein the call is forwarded to another device having a phone number entered by the customer.

70. The apparatus of claim 68, wherein the call is forwarded to another device having a phone number selected from a list by the customer.

71. An apparatus for managing a call, comprising:
means for receiving, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected;
means for retrieving data corresponding to the customer using the information

pertaining to the call;

means for sending a notification of the call to a device associated with the customer, wherein the device is determined based on the retrieved data;

means for receiving a response to the notification from the customer; and

means for instructing the service control point to connect the call based on the response.

72. An apparatus for managing a call in real-time based on input from a user, comprising:

means for receiving information pertaining to a call to the user;

means for sending a notification of the call to a first device associated with the user;

means for receiving a response to the notification from the user; and

means for forwarding the call to a second device based on the response, wherein the user provides a telephone number for the second device.

73. The apparatus of claim 72, the means for sending comprising:

means for retrieving data corresponding to the user using the information pertaining to the call;

means for selecting a device associated with the user to receive the notification based on the data corresponding to the user; and

means for providing the notification to the selected device for display on the

selected device.

74. An apparatus for managing a call in real-time based on input from a user, comprising:

means for receiving information pertaining to a call to a user;

means for retrieving data corresponding to the user using the information pertaining to the call;

means for selecting a device associated with the user to receive a notification of the call based on the retrieved data corresponding to the user;

means for providing the notification to the selected device for display on the selected device;

means for receiving a response to the notification from the user; and

means for initiating a call screening process based on the response.

75. An apparatus for managing a call, comprising:

means for receiving, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected;

means for retrieving data corresponding to the customer using the information pertaining to the call;

means for determining features enabled for the customer based on the information pertaining to the call;

means for selecting a device associated with the customer to receive a notification of the call based on the retrieved data;

means for providing the notification to the selected device;

means for receiving a response to the notification from the customer; and

means for instructing the service control point to connect the call based on the response.

76. An apparatus for managing a call, comprising:

a memory having a program that: receives, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected; sends a notification of the call to a device associated with the customer; receives a response to the notification from the customer; and instructs the service control point to connect the call based on the response; and

a processor that runs the program.

77. An apparatus for managing a call, comprising:

a memory having a program that: receives, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected; retrieves data corresponding to the customer using the information pertaining to the call; sends a notification of the call to a device associated with the customer, wherein the device is determined based on the retrieved

data; receives a response to the notification from the customer; and instructs the service control point to connect the call based on the response; and
a processor that runs the program.

78. An apparatus for managing a call, comprising:

a memory having a program that: receives, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected; retrieves data corresponding to the customer using the information pertaining to the call; determines features enabled for the customer based on the information pertaining to the call; selects a device associated with the customer to receive a notification of the call based on the retrieved data; provides the notification to the selected device; receives a response to the notification from the customer; and instructs the service control point to connect the call based on the response; and

a processor that runs the program.

79. A computer-readable medium containing instructions for performing a method for managing a call, the method comprising:

receiving, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected;
sending a notification of the call to a device associated with the customer;
receiving a response to the notification from the customer; and

instructing the service control point to connect the call based on the response.

80. The computer-readable medium of claim 79, wherein a switch intercepts the call.

81. The computer-readable medium of claim 80, wherein the switch intercepts the call upon encountering a trigger.

82. The computer-readable medium of claim 80, wherein the service control point sends an announcement to the switch.

83. The computer-readable medium of claim 82, wherein the announcement is played for a calling party as long as the service control point is waiting for a response.

84. The computer-readable medium of claim 79, wherein the information pertaining to the call comprises at least one of call state data, a call intercept indicator, a voice mail indicator, time zone data, user ID, called number data, calling name data, calling number data, and calling party number presentation information.

85. The computer-readable medium of claim 79, the method further comprising:

retrieving data corresponding to the customer using the information pertaining to the call; and

determining features that are enabled for the customer based on the information pertaining to the call.

86. The computer-readable medium of claim 79, the sending comprising:
retrieving data corresponding to the customer using the information pertaining to the call;

selecting a device associated with the customer to receive the notification based on the data corresponding to the customer; and

providing the notification to the selected device for display on the selected device.

87. The computer-readable medium of claim 85, the sending comprising:
selecting a device associated with the customer to receive the notification based on the retrieved data; and

providing the notification to the selected device for display on the selected device.

88. The computer-readable medium of claim 87, wherein the retrieved data comprises an indication of an access point that the customer is using.

89. The computer-readable medium of claim 87, wherein the retrieved data comprises at least one of an indication of an access point that the customer is using, a call block list, a list of forwarding devices, a list of forwarding numbers, voice mail preferences, and a list of recordings.

90. The computer-readable medium of claim 87, the retrieving comprising:
determining a customer identification using called number data; and
finding an indication of an access point being used by the customer, utilizing the customer identification.

91. The computer-readable medium of claim 79, wherein the notification comprises a plurality of customer-selectable call disposition options.

92. The computer-readable medium of claim 91, wherein the notification comprises an indication of a calling number and a called number.

93. The computer-readable medium of claim 91, wherein the notification is displayed on the device associated with the customer.

94. The computer-readable medium of claim 91, wherein the call disposition options comprise at least one of sending a call to voice mail, forwarding a call to another device, performing a call screening operation, accepting a call, playing

an announcement, placing a call on hold, scheduling a call back operation, performing an automatic call back operation, performing a call block operation, and initiating a conference call.

95. The computer-readable medium of claim 84, wherein the notification comprises a plurality of customer-selectable call disposition options limited by the features determined to be enabled.

96. The computer-readable medium of claim 79, the instructing comprising:

 sending the service control point response information indicative of a response to the notification from the customer.

97. The computer-readable medium of claim 96, wherein the response information includes at least one of call disposition information, forwarding number information, nature of forwarding number information, carrier access code, announcement type, and ring cadence.

98. The computer-readable medium of claim 97, wherein the call disposition information comprises an indication of at least one of sending a call to voice mail, forwarding a call to another device, performing a call screening operation, accepting a call, playing an announcement, placing a call on hold, scheduling a call

back operation, performing an automatic call back operation, performing a call block operation, and initiating a conference call.

99. The computer-readable medium of claim 79, the instructing comprising:

instructing the service control point to forward the call to another device based on the response to the notification.

100. The computer-readable medium of claim 99, wherein the call is forwarded to another device having a phone number entered by the customer.

101. The computer-readable medium of claim 99, wherein the call is forwarded to another device having a phone number selected from a list by the customer.

102. A computer-readable medium containing instructions for performing a method for managing a call in real-time based on input from a user, the method comprising:

receiving information pertaining to a call to the user;

sending a notification of the call to a first device associated with the user;

receiving a response to the notification from the user; and

forwarding the call to a second device based on the response, wherein the user

provides a telephone number for the second device.

103. The computer-readable medium of claim 102, the sending comprising:
retrieving data corresponding to the user using the information pertaining to the
call;

selecting a device associated with the user to receive the notification based on
the data corresponding to the user; and

providing the notification to the selected device for display on the selected
device.

104. A computer-readable medium containing instructions for performing a
method for managing a call in real-time based on input from a user, the method
comprising:

receiving information pertaining to a call to a user;

retrieving data corresponding to the user using the information pertaining to the
call;

selecting a device associated with the user to receive a notification of the call
based on the retrieved data corresponding to the user;

providing the notification to the selected device for display on the selected
device;

receiving a response to the notification from the user; and

initiating a call screening process based on the response.

105. A computer-readable medium containing instructions for performing a method for managing a call, the method comprising:

- receiving, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected;
- retrieving data corresponding to the customer using the information pertaining to the call;
- determining features enabled for the customer based on the information pertaining to the call;
- selecting a device associated with the customer to receive a notification of the call based on the retrieved data;
- providing the notification to the selected device;
- receiving a response to the notification from the customer; and
- instructing the service control point to connect the call based on the response.

106. A method for managing a call, comprising:

- receiving notification of a call to a customer at a device associated with the customer, wherein the device is determined based on retrieved data corresponding to the customer, and the retrieved data was retrieved using information pertaining to the call;
- receiving input from the customer indicative of a response to the notification; and
- sending, to a server, response information reflective of the response to the

notification, wherein the server instructs a service control point to connect the call based on the response to the notification.

107. A device for use in managing a call in real-time based on input from a user, comprising:

a memory having a program that: receives notification of a call to the user at the device, wherein the device is one of a plurality of devices associated with the user, the device is determined based on retrieved data corresponding to the user, and the retrieved data was retrieved using information pertaining to the call; receives input from the customer indicative of a response to the notification; and sends response information to a server reflective of the response to the notification, wherein the server instructs a service control point to connect the call based on the response to the notification;

a user interface that displays the notification; and

a processor that runs the program.

108. A method for managing a call, comprising:

sending, to a service center, information pertaining to a call to a customer, wherein the service center: retrieves data corresponding to the customer using the information pertaining to the call; sends a notification of the call to a device associated with the customer, wherein the device is determined based on the retrieved data, and the device is one of a plurality of devices associated with the customer; and provides

response information reflective of a response to the notification from the customer;
receiving the response information from the service center; and
connecting the call based on the response information.

109. An apparatus for managing a call, comprising:

means for sending, to a service center, information pertaining to a call to a customer, wherein the service center: retrieves data corresponding to the customer using the information pertaining to the call; sends a notification of the call to a device associated with the customer, wherein the device is determined based on the retrieved data, and the device is one of a plurality of devices associated with the customer; and provides response information reflective of a response to the notification from the customer;

means for receiving the response information from the service center; and
means for connecting the call based on the response information.

110. A system for managing a call, comprising:

a voice network including a service control point operable to determine how a call is connected;

a data network;

a plurality of devices associated with a user;

a service center operable to: receive information pertaining to a call to the user from the service control point; retrieve data corresponding to the user using the

information pertaining to the call; send a notification of the call to a device associated with the user via the data network, wherein the device is determined based on the retrieved data and is one of the plurality of devices associated with the user; and instruct the service control point to connect the call based on a response to the notification from the user by providing the service control point with response information reflective of the response, wherein

the service control point receives the response information from the service center and connects the call based on the response information.

111. An apparatus for managing a call, comprising:

a first server operable to receive, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected; and

a second server operable to send a notification of the call to a device associated with the customer, wherein the first server receives a response to the notification from the customer and instructs the service control point to connect the call based on the response.

112. An apparatus for managing a call, comprising:

a first server operable to receive, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected; and

a second server operable to retrieve data corresponding to the customer using the information pertaining to the call and send a notification of the call to a device associated with the customer, wherein the device is determined based on the retrieved data, wherein the first server receives a response to the notification from the customer and instructs the service control point to connect the call based on the response.

113. An apparatus for managing a call, comprising:

a first server operable to receive, from a service control point, information pertaining to a call to a customer, the service control point being operable to determine how a call is connected; and

a second server operable to retrieve data corresponding to the customer using the information pertaining to the call, determine features enabled for the customer based on the information pertaining to the call, select a device associated with the customer to receive a notification of the call based on the retrieved data, and provide the notification to the selected device, wherein the first server receives a response to the notification from the customer and instructs the service control point to connect the call based on the response.